



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,623	03/21/2000	KLAUS-LEO WILBUER	SWR-0004	2649

23413 7590 03/20/2002

CANTOR COLBURN, LLP  
55 GRIFFIN ROAD SOUTH  
BLOOMFIELD, CT 06002

EXAMINER

CHAMBERS, TROY

ART UNIT	PAPER NUMBER
----------	--------------

3641

DATE MAILED: 03/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**BEST AVAILABLE COPY**

**Office Action Summary**

Application No.

09/446,623

Applicant(s)

WILBUER ET AL.

Examiner

Troy Chambers

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                            | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other:  |

Art Unit: 3641

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4238299 issued to Wang in view of EPO Publication EP 55679 issued to Baburek. Wang discloses a process for coating a shielding element with a boron copper layer. However, Wang does not disclose expressly that his method is applicable to deposition boron nickel particles.

Baburek discloses a method for coating a shielding element with a boron-nickel layer (page 3, ll. 10-12 and 34-36).

3. With respect to claims 1 and 13, it would have been obvious to one having ordinary skill in the art to apply the coating method of Wang using the materials disclosed in Baburek. The suggestion/motivation for doing so would have been to agitate the copper boron electrolyte solution thereby achieving an even distribution (Wang, col. 3, ll. 19-40).

4. With respect to claim 2, see Wang, col. 4, ll. 48-59.

5. With respect to claim 3, see Wang, col. 4, ll. 12-17.

6. With respect to claim 4, see Wang, col. 3, ll. 19-22

Art Unit: 3641

7. With respect to claim 5, one having ordinary skill in the art would find it obvious to remove the carbon element from the boron carbon compound. Removing the carbon element would eliminate the abrasive properties of the boron carbon compound but would physically allow more boron to be embedded in another metal as a result of the increase in molecular spacing.

8. With respect to claim 6, Baburek discloses a method for coating a shielding element with a boron-nickel layer using a plasma torch (Abst.).

9. With respect to claim 7, Wang discloses electrolytic boron carbide deposition (Abst.).

10. With respect to claim 8, the combined disclosures of Wang and Baburek anticipate claim 1 and therefore would inherently obtain a coating of the thickness claimed by the Applicant.

11. With respect to claims 9, 10, and 13, see Wang, col. 1, ll. 20-22.

12. With respect to claim 11, see Wang, col. 2, ll. 19-22.

13. With respect to claim 12, see Wang, col. 2, ll. 58-61.

### ***Response to Arguments***

14. Applicant's arguments filed 01 November 2001 have been fully considered but they are not persuasive. Applicant argues that the phrase "at least from time to time, a relative movement is produced between the surface to be coated and the dispersion bath." Applicant admits in his argument that the stirrer disclosed in Wang "is stopped to allow carbide particles 26 to settle onto the surface of the tube 18 while electroplating

Art Unit: 3641

proceeds." This is the relative movement that the Examiner is referring to. The fact that the stirrers are stopped does not mean that "relative movement" also ceases. In a fluid, movement can continue long after the agitating force has been removed. Wang does not disclose that the relative movement of the fluid discontinues with the stopping of the stirrers. Also, there is no requirement in applicant's claim that the "relative movement" is a function of a continuous movement of an agitator.

### ***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is (703) 308-

Art Unit: 3641

5870. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached at (703) 306-4198.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-4177. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4195.



MICHAEL J. CARONE  
SUPERVISORY PATENT EXAMINER